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# JAPAN: TRADITIONAL ELEMENTS IN A PLANNED MARKET ECONOMY

But to expect Americans, who are accustomed to thinking of their nation as number one, to acknowledge that in many areas its supremacy has been lost to an Asian nation and to learn from that nation is to ask a good deal. Americans are peculiarly receptive to any explanation of Japan's economic performance which avoids acknowledging Japan's superior competitiveness.

—Ezra F. Vogel, Japan As Number One, 1979, p. 225

The modern myth of Japan is assuredly the biggest hoax of the present age . . . The economy has obviously slowed down, income distribution has become skewed, while landowners have become rich ordinary families can no longer afford their own home. There are now poor people as well as many old people who are scared about what will become of them.

—Jon Woronoff, Japan as-Anything but-Number One, 1991, pp. 7–8

The industrialized capitalist countries are engaged in severe economic competition. Private companies square off toe to toe. Sometimes, in the heat of the contest, their cheering sections—government officials and politicians—vilify opponents, yell "unfair," and demand new rules. Japan has quietly endured this rhetorical crescendo from the United States for years. We cannot remain silent forever. It is time to speak out.

-Shintaro Ishihara, The Japan That Can Say No, 1989, pp. 40-41

# Introduction: Japan as a New Traditional Economy?

From the ashes of defeat and poverty at the end of World War II Japan experienced the most rapid rate of sustained economic growth in the world to become its second largest economy. It achieved this while maintaining fairly low unemployment and inflation rates and a greater degree of income equality than most capitalist economies. Its people have the world's longest life expectancy. It leads in many areas of technology. It has large trade surpluses

that do not decline. It has become the world's largest creditor and possibly its leading financial power. Despite recent difficulties many think that it is "Number One."

These achievements inspire admiration and envy from other nations. Conflicts with other nations over trade issues threaten to plunge the world economy into a trade war and depression. Japan's very success makes its every action important for the whole world economy.

There is little agreement about the nature of Japan's success, and some questioning about whether it is successful. A profound truth about Japan is that every supposed fact about it abounds in paradox and multiple interpretations. For every interpretation by an admiring "Japanologist" there is a counter interpretation by a critical "revisionist."

Where admirers see effective Japanese management bringing about harmonious labor-management relations, critics see oppression of labor movements by triumphant management. Where admirers see highly educated and technically innovative workers, critics see robotized rote learners who only know how to imitate but not to create. Where admirers see ever-rising living standards, critics see "workaholics in rabbit hutches." Where admirers see innovative government-business relations, critics see a corrupt "Japan, Incorporated." Where admirers see an open and cosmopolitan nation with lower tariffs and quotas than its trading partners, critics see an insular and arrogant nation cheating its trading partners through devious methods. Where admirers see a democratic and pacifistic nation, critics see a nation where dictatorial structures from its dark past persist and a potentially militaristic nationalism is rising.<sup>2</sup>

Even among admirers there are debates about the basis of Japanese success. Advocates of different schools of economic thought and ideology seek to "take credit" for Japanese success by attempting to fit it Rashomonlike into the straitjackets of their favored approaches. Thus advocates of government economic intervention argue that bureaucratic guidance through indicative planning and industrial policy has been key to Japanese success. Advocates of laissez-faire argue that these have been more of a hindrance than a help, with the most dynamic sectors ignoring the government bureaucrats.

The Japanese economic system is a subtle mixture of structures and systems unique in the world, despite attempts by others at imitation. Undoubtedly it is a market capitalist economy. Nevertheless government does engage in indicative planning and has significant influence. Japan was the first society

<sup>&</sup>lt;sup>1</sup>This is a deep characteristic of Japanese culture, as illustrated by the Japanese film, Akira Kurosawa's Rashomon, in which an incident is recounted afterwards differently by different participants. The Japanese distinguish between tatemae, a surface illusion, which is initially presented in a discussion or negotiation, and honne, which reflects the underlying reality.

<sup>&</sup>lt;sup>2</sup>This last paradox is an old one in Japanese culture. As described in the world's first novel, *The Tale of Genji*, by the 11th-century Lady Murasaki, *samurai* were supposed to be both sensitive poets and fierce warriors. This paradox is captured in the title of Ruth Benedict's 1946 classic of Japanology, *The Chrysanthemum and the Sword*.

of non-European origin to carry out industrialization and modern economic growth. It succeeded in adopting foreign technologies and practices without giving up its indigenous culture, symbolized by the late 19th-century slogan, "Japanese spirit and Western ability."

Japan may actually be the most successful example of a new traditional economy in the world. Many argue that the key to Japan's success is the "familistic groupism" of Japanese society, often labeled a "feudalistic hold-over," that supposedly is responsible for both its harmonious labor-management relations and its harmonious government-business relations.

In Chapter 4 it was argued that the household economy is the essence of the traditional economy. Japanese society is not dominated by a fundamentalist religious movement, but it is permeated by the idea that companies, groups of companies, bureaucracies, and society as a whole are families or households.<sup>3</sup> Thus the Japanese economy combines a traditional household orientation with advanced modern technologies and approaches. But given the dominance of market capitalism and the role of government guidance, a more accurate description is "planned market capitalism with traditional elements."

# Historical and Cultural Background of the Japanese Economy

## The Absorption of Chinese Culture

The ability of the Japanese to absorb foreign influences and technologies while maintaining their cultural core arose from having a strong sense of identity. That came from their high degree of homogeneity stemming from their long isolation. Like Britain Japan is an island nation, but 100 miles off the nearest continent rather than just 20.

The original religion was Shinto, emphasizing worship of ancestral and nature spirits and of the emperor because of his claimed descent from Amaterasu, goddess of the rising sun, a status disavowed by Emperor Hirohito at Japan's surrender in 1945.

The model for Japan's integrating foreign influences into its society was its absorption of Chinese culture in the sixth and seventh centuries. Chinese writing was adopted but modified.<sup>4</sup> Buddhism and Confucianism were introduced but also were modified, without displacing native Shintoism. Whereas in most societies an individual will be one religion to the exclusion of others, most Japanese view themselves as simultaneously following all three, an example of their ability to deal with multiple realities. Shintoism is followed for marriages, Buddhism for funerals, and Confucianism for civil and political behavior.



 $<sup>^{3}</sup>$ In Japanese before the modern era the word for house, ie, meant both family and business enterprise. Many Japanese argue that the ie is the foundation of Japanese civilization.

<sup>&</sup>lt;sup>4</sup>Linguistically Japanese is related to Korean, but very distinct from any variety of Chinese.

Shintoism and Buddhism<sup>5</sup> do not have much influence on Japanese economic thought or behavior, but the Japanese form of Confucianism does.<sup>6</sup> After 1600 Confucian values became deeply entrenched in the educational system, emphasizing especially loyalty to one's immediate superiors and respect for state authority. After 1868, influential businessmen emphasized Confucian values and the transfer of the *bushido* code of the samurai warriors to business management practices, symbolized by the modern phrase "from samurai to sarariman" (salaryman). The most important Confucian value in Japan is wa (harmony), which, along with loyalty, cements the familistic groupism that dominates the Japanese economy.

## The Tokugawa Shogunate and the Meiji Restoration

After 1185 rule was in the hands of military commanders known as shoguns, appointed by the emperor to whom they were nominally subject.<sup>7</sup> During the 1500s Portuguese traders and Jesuit priests penetrated Japan and almost dominated the country, but they were expelled in 1603 after which the nation closed up under the Tokugawa shogunate. During this isolation, Japan had considerable development of business,<sup>8</sup> transportation infrastructure, and literacy, laying a foundation for later economic takeoff.

After being forcibly opened to outsiders in 1853 by the arrival of Commodore Perry's "black ships" from the United States, Tokugawa society fell into crisis. Humiliated by military defeats, landless samurai under the slogan "revere the emperor, expel the barbarians" overthrew the Tokugawa shogun in 1868. This was the Meiji Restoration, named for the emperor of the time.

Those who came to power both opened the country dramatically to foreign influences and technologies and removed all rights and powers of the samurai, thereby ending feudalism. The samurai were paid off with bonds in 1873 with which many of them started businesses. Farmers were given the land. Students were sent abroad to study, especially to the United States and Germany.

<sup>&</sup>lt;sup>5</sup>The best known form of Japanese Buddhism is Zen, very popular with the samurai from the 1200s onwards. Some argue that Zen increases the ability of Japanese managers to deal with indirection and vagueness and that it enhances creativity in research and development (see Box 6-1).

<sup>&</sup>lt;sup>6</sup>A main difference between Chinese and Japanese Confucianism is that the former emphasizes benevolence as the supreme virtue whereas the latter emphasizes loyalty. This combined with state Shinto emperor worship to support Japanese militaristic nationalism in World War II. It also helps maintain status hierarchies in Japanese companies and bureaucracies. See Michio Morishima, Why Has Japan 'Succeeded'? Western Technology and the Japanese Ethos (Cambridge: Cambridge University Press, 1982), and Tessa Morris-Suzuki, A History of Japanese Economic Thought (London: Routledge, 1989).

<sup>&</sup>lt;sup>7</sup>Usually the real ruler would be a prime minister or an adviser to a prime minister to the shogun. This tradition of indirect rule persists today, with the greatest power being in the hands of party politicians with no official positions. This has led some foreigners to complain that "no one rules" and that negotiations with prime ministers or other officials about trade or other issues are pointless.

<sup>&</sup>lt;sup>8</sup>The ancestors of two of the six dominant modern *keiretsu*, Mitsui and Sumitomo, were founded in this period, the former as a dry goods business, the latter as a copper miner and smelter.

The state started many industrial enterprises, pushing industrial development under the slogan "rich country, strong military," only to privatize them after a fiscal crisis in 1883. Industrial growth took off—cotton spinning became the first internationally competitive industry by 1900, and iron and steel, railroads, mining, and machinery also expanded rapidly, initially supported by "infant industry" tariffs.

Japan also imitated the European penchant for imperializing neighbors. In 1895 Taiwan was conquered after a war with China. Next came the 1905 Russo-Japanese War, culminating in the first victory of an Asian power over a European one in modern times, and Japan took control of Korea. By the 1920s, the economy was dominated by four leading zaibatsus: Mitsui, Mitsuishi, Sumitomo, and Yasuda, conglomerates that each had a dominating bank of the same name.

In 1931 the Japanese army seized the Chinese province of Manchuria and established the puppet state of Manchuko. Economic central planning elements were tested there that were used later. In 1937 Japan invaded China, later allying with Germany and Italy. Its 1941 bombing of Pearl Harbor brought the United States into World War II. On August 16, 1945, Japan surrendered after the United States dropped atomic bombs on Hiroshima and Nagasaki.

# The American Occupation and Its Aftermath

On September 2, 1945, General Douglas MacArthur arrived to become the Supreme Commander of the Allied Powers and the virtual ruler of Japan until the Occupation ended in 1952, the first time in Japanese history that a foreign power ruled. After an initial period of radical purgings and reforms up to 1947, MacArthur encouraged continuity of rule by traditional elites<sup>11</sup> as Japan was increasingly seen as a Cold War ally.

The United States imposed a constitution that formally demilitarized Japan. Much of the bureaucracy survived unscathed, except for a few name changes. Labor unions were legalized, as were the Communist and Socialist parties. The zaibatsus were broken up. Land was redistributed. Again the Japanese integrated foreign influences into their society and culture, this time from the United States.

Until around 1960 labor militancy was considerable before "harmonious" relations with management finally emerged. In 1955 the two leading

<sup>&</sup>lt;sup>9</sup>Japan denied that it practiced imperialism, arguing that it was fighting against the racist imperialism of Europe and the United States, a view still held by some in Japan. During World War II Japan claimed to be establishing the "Greater East Asia Co-Prosperity Sphere." Japanese soldiers were surprised when they were not welcomed in such European colonies as Vietnam and Malaya. Some argue a Japanese-dominated Co-Prosperity Sphere, wherein Japanese investment ties economies closely to buying Japanese goods, has been established de facto.

<sup>&</sup>lt;sup>10</sup>Russia and Japan have an ongoing dispute over islands taken by the Soviet Union at the end of World War II.

<sup>&</sup>lt;sup>11</sup>A supreme symbol of that continuity was MacArthur's lack of a demand for Emperor Hirohito to step down. Hirohito reigned from 1926 until his death in 1989.

conservative parties united to form the Liberal Democratic Party (LDP), which ruled Japan until 1993. From the mid-1950s to the 1970s the old zaibatsus re-formed as loosely organized *keiretsu*, each centered on a bank and a trading company. Mitsui, Mitsubishi, and Sumitomo kept their names, but Yasuda became Fuyo and two other leading keiretsu emerged, Sanwa and Ikkan.

By 1955 real per capita income reached its highest prewar levels. By the late 1960s large and persistent trade surpluses emerged. By the mid-1970s per capita income equaled that in many advanced economies and continued to grow more rapidly than in any of them, despite decelerating. In 1975, Japan became one of the G-7 countries<sup>13</sup> whose leaders meet in economic summits each June. Japan had arrived as a world economic leader.

## The Microeconomic Foundations of the Japanese Economy

# The "Three Sacred Treasures" of Labor-Management Relations

At the foundation of the Japanese economy is its highly educated and well-motivated labor force. The country has few natural resources and at the end of World War II much of its capital stock was destroyed. Many Japanese innovations that improve quality and productivity have been suggested by workers on site, often through *quality circles*. Such loyalty and commitment to the firms they work for is something that many other countries have sought to emulate.<sup>14</sup>

Basic to Japanese labor are the "three sacred treasures": <sup>15</sup> lifetime employment, seniority-based wages, and enterprise unions. More conventional wisdom about Japanese industry is that it offers frequent intraenterprise job rotation by multifunctional workers, much on-the-job firm-specific training, widespread bonus payments and flexible compensation schemes, contracts negotiated annually in a synchronized manner, stable employment, and large severance payments at retirement but few pensions. This conventional wisdom has been questioned, notably because of the *dual economy*. Portions of the conventional wisdom do not apply to the 50 percent of the labor force in small firms or to most women workers in large firms. <sup>16</sup>

<sup>&</sup>lt;sup>12</sup>It is an old wisecrack that the LDP is neither liberal, democratic, nor even a party.

<sup>&</sup>lt;sup>13</sup>The other six are the United States, Canada, the Federal Republic of Germany, France, the United Kingdom, and Italy. Japan is also in the smaller G-5 that omits Canada and Italy and the even smaller G-3 that further omits the United Kingdom and France.

<sup>&</sup>lt;sup>14</sup>Jon Woronoff (*Japan-As-Anything But-Number-One* [Armonk: M. E. Sharpe, 1990], chap. 2) claims that this loyalty is a false *tatemae* phenomenon. Workers are forced to join quality circles and are pressured into exhibiting apparent loyalty to their firms while the real *honne* is that they hate their bosses and their jobs just like workers everywhere.

<sup>&</sup>lt;sup>15</sup>This term was invented by an American, James Abegglen, *The Japanese Factory* (Glencoe: The Free Press, 1958).

<sup>&</sup>lt;sup>16</sup>Women are strongly discouraged from working if they get married and have children, although this attitude is changing.

Lifetime Employment. Lifetime employment is seen as key to engendering loyalty and drawing forth innovative suggestions to improve productivity. Critics suggest lifetime employment is limited to about 30 percent of the labor force, mostly educated males in large firms who must retire at age 55 with large severance payments, although often with assistance in getting other jobs in smaller firms. However comparisons of tenure patterns between Japan and the United States find Japanese workers more likely to stay with a single firm for a longer time, even in small firms.<sup>17</sup>

This system depends on stability of employment, which has been aided by rapid growth of the economy. It is eased by the synchronized annual negotiating system and by the relatively docile enterprise unions. Also the bonus system, amounting to up to 30 percent of compensation in some cases, may amount to a form of profit sharing that stabilizes the economy as in the "share economy" theory, although this has been questioned. If the recent slowdown of the Japanese economy leads to permanently increased unemployment we could see pressure on the system of stable employment.

One element of long-term employment is the development of firm-specific human capital by rotating workers from job to job within the firm. Workers know all about the firm, but lack skills transferrable to other firms. This onthe-job training of blue collar workers leads to their "white collarization" in larger firms and thus their greater loyalty to the firm. But loyalty is a two-way street. Firms are more willing to engage in firm-specific training if they believe workers will stick around for a long time.

Although some argue that lifetime employment reflects a deep Confucian code, it and many other distinctively Japanese practices are probably more recent developments. The real beginning of these practices may have been during World War II when the government became concerned about worker morale issues for maintaining military production.<sup>19</sup>

Seniority Wages. Seniority wages, with lifetime employment, are viewed as part of the general package that produces loyalty to the firm and also as consistent with the Confucian view of respect for elders. If one sticks with the firm one moves up in salary.

In Japan there is a steeper age-wage profile for blue collar workers than in other countries, reflecting the white collarization of Japanese blue collar workers, along with an across the board greater tendency for seniority wages in Japan than in the United States.<sup>20</sup> Nevertheless there is a trend towards more emphasis on merit rather than seniority in wage setting, with strong

<sup>&</sup>lt;sup>17</sup>See Masanori Hashimoto and John Raisian, "Employment Tenure and Earnings Profiles in Japan and the United States," American Economic Review 75 (1985), pp. 721-35.

<sup>&</sup>lt;sup>18</sup>See Merton J. Peck, "Is Japan Really a Share Economy?" Journal of Comparative Economics 10 (1986), pp. 427-32.

<sup>&</sup>lt;sup>19</sup>See Tetsuji Okazaki, "The Japanese Firm Under the Wartime Planned Economy," Research Institute for the Japanese Economy Discussion Paper 92-F-4, University of Tokyo.

<sup>&</sup>lt;sup>20</sup>See Masanori Hashimoto and John Raisian, "Employment Tenure and Earnings Profiles"

expectations among both management and labor in Japan that the system will move in the direction of performance-based pay.21

Enterprise Unions. Enterprise unions (to be contrasted with industrial or craft unions prevalent in the United States) go along with the above package. If one is committed for life to a specific company and one has been working in several different jobs with the company, thus not being tied to a particular skill or craft, then it is logical to belong to a union that negotiates directly with that company and only that company. Stability of labor-management relations leads to the "happy family of the firm." Such unions contain both white and blue collar workers and partly account for the smaller wage differentials between them. Enterprise unions are the pattern in Japan and they are strongly supported by both management and labor. Nevertheless some critics consider them to be ineffective "patsies" for management interests.

Like the United States, Japan has had a steadily declining rate of unionization, from a peak of 55.8 percent of the labor force in 1949 to 29.1 percent in 1984.22 This decline may reflect docility of the unions, which did not always hold. In the 1940s and the 1950s Japan had a higher strike rate than in Britain or France, and the unions were linked to radical left-wing politics, including some with Japan's Communist Party. The turning point towards moderation came with the breaking of a long steel strike in 1959 and a more bitter mining dispute in 1960.

The change in leadership of the steel unions after 1959 led to the synchronized system of spring negotiations. This avoids staggered wage contracts, minimizing inflationary momentum that can arise as one union imitates another, thus improving inflation-unemployment trade-offs and stabilizing employment. After the first oil price shock in 1973 the unions asked for high wage increases that triggered increases in both unemployment and inflation. After the second oil price shock in 1979 they avoided high demands, thereby maintaining greater macroeconomic stability.

# The Japanese Firm and the Japanese Manager

The Keiretsu System. The most distinctive element of Japanese industrial organization is the existence of interlocked associations of firms known as keiretsu, which are either horizontal keiretsu or vertical keiretsu. Horizontal keiretsu are essentially revivals of the prewar zaibatsus,23 firms in different industries all linked to a common bank and trading company. Vertical keiretsu

<sup>&</sup>lt;sup>21</sup>See Ken Sakuma, "Changes in Japanese-Style Labor-Management Relations," Japanese Economic Studies 16 (1988), pp. 3-48.

<sup>&</sup>lt;sup>22</sup>Ken Sakuma, "Changes in Japanese-Style Labor-Management Relations."

<sup>&</sup>lt;sup>23</sup>The difference is that zaibatsus were single holding companies whereas the firms in keiretsus maintain their formal independence.

**TABLE 6-1** Intrakeiretsu Relations

Keiretsu	Number of Firms	Interlocking Shares	Intragroup Loans
Mitsui	24	17.10%	21.94%
Mitsubishi	29	27.80	20.17
Sumitomo	20	24.22	24.53
Fuyo	29	15.61	18.20
Sanwa	44	16.47	18.51
Ikkan	47	12.49	11.18

Source: Takatoshi Ito, The Japanese Economy (Cambridge, MA: MIT Press, 1992), p. 181.

are a set of suppliers and distributors linked to a major industrial producer by long-term contracts. U.S. trade negotiators charge that vertical keiretsu are anti competitive and keep out U.S. suppliers. A keiretsu is yet another familistic grouping typical of the Japanese economy.

The two kinds of keiretsu coexist. Thus Toshiba Corpofation, which makes computers, consumer electronics, semiconductors, and heavy machinery, is at the center of a vertical keiretsu that includes 11,000 franchised distributors, about 200 direct suppliers, and about 600 suppliers of the direct suppliers. At the same time Toshiba is a member in good standing of the Mitsui horizontal keiretsu. But some vertical keiretsu stand alone, such as those associated with Honda and Sony, both very independent companies. Members of horizontal keiretsu tend to be large companies that practice the three sacred treasures of labor-management relations whereas peripheral firms of vertical keiretsu tend not to.

All keiretsu have much cross-holding of stocks. Horizontal keiretsu have much bank ownership and a large proportion of loans from the bank. In some horizontal keiretsu the CEOs of firms meet on a weekly basis to coordinate strategies and behaviors. These relations extend to their workers who tend to buy from companies in their company's keiretsu.

Table 6-1 shows the number of firms, the average percentage of interlocking shares, and the average percent of intragroup loans for the six largest horizontal keiretsu in 1987. These Big Six together had 4.14 percent of employees, 12.96 percent of assets, 15 percent of capital, 14.35 percent of sales, and 11.7 percent of gross profits in the Japanese economy.<sup>24</sup>

Table 6-2 shows some major companies in some leading sectors associated with two of the Big Six horizontal keiretsu, one from the more tightly controlled group (Mitsui) and one from the less tightly controlled group (Ikkan).

Some keiretsu have more than one firm per sector and some firms belong to more than one keiretsu, notably Hitachi which belongs to Fuyo, Sanwa, and

<sup>&</sup>lt;sup>24</sup>Takatoshi Ito, The Japanese Economy (Cambridge, MA: MIT Press, 1992), p. 188.

TABLE 6-2 Selected Keiretsu Members

Sector	Mitsui	Ikkan
Banking	Mitsui Bank	Dai-Ichi Kangyo Bank
Life insurance	Mitsui Life	Asahi Life
		Fukoku Life
Trading	Mitsui Bussan	C. Itoh
		Kanematsu Gosho
Construction	Mitsui Construction	Shimizu Construction
	Sanki Kogyo	
Food & drink	Nihon Mills	
Textiles	Tohre	Asahi Kasei Kogyo
Cement	Onoda Cement	Chichibu cement
Steel	Nihon Seikojo	Kawasaki Steel
		Kobe Seiko
		Nihon Heavy Industries
Electronics	Toshiba	Hitachi
		Fujitsu
		Yasukawa Electronics
		Nihon Columbia
Automobiles	Toyota	Isuzu
Shipbuilding	Mitsui Shipbuilding	Ishikawajima harima
		Kawasaki Heavy Industries
Optics		Asahi Kagaku
Department stores	Mitsukoshi	Seibu Department Store

Source: Takatoshi Ito, The Japanese Economy (Cambridge, MA: MIT Press, 1992), pp. 185-87.

Ikkan simultaneously. These are the three less loosely interconnected, hence less zaibatsu-like, of the Big Six horizontal keiretsu. Many of these firms remain predominantly owned and controlled by the family of the founderentrepreneur, Toyota being a prominent example.

It has been argued that these entities are able to enjoy network externalities of one sort or another. But there is evidence that group membership may have a negative impact on profitability relative to independents run by founder-entrepreneurs such as the late Akio Morita of Sony.<sup>25</sup> These firms make higher interest payments to their coordinating banks, which seem to be the big gainers in terms of profits, although the firms may gain security of financing.

Broadly there has been a trend towards banks and companies owning each other's stock beyond keiretsu relationships, with the share of Japanese stocks held outside of keiretsu relationships rising from 32.7 percent in 1955 to 67.1

<sup>&</sup>lt;sup>25</sup>Richard Caves and Masu Uekasa, *Industrial Concentration in Japan* (Washington: Brookings Institution, 1976), pp. 72–83.

percent in 1989. In contrast the proportion of banks and companies that own each other's stock for the United States in 1988 was 35.4 percent.<sup>26</sup> This has led some to wisecrack that Japan is a "capitalism without capitalists."

This pattern arose after Japan joined the Organization for Economic Cooperation and Development (OECD) in the 1960s and was pressured to open its stock market to foreign investors. This high level of cross-holdings prevents foreigners from taking over companies, and in 1989 foreigners owned only 3.9 percent of Japanese stocks.<sup>27</sup>

Vertical keiretsu may achieve efficiencies because their stable long-term contracts allow for "just-in-time" delivery (kanban) systems that minimize inventory costs and encourage superior quality controls. A large firm will generally have more than one supplier for a part, thus maintaining a degree of competitiveness that does not exist when parts suppliers are merely subsidiaries of the major firm, as is often the case among U.S. automobile producers. Often the major firms help the smaller firms with investment and marketing. But the smaller firms generally bear the brunt of unemployment in a slow-down, providing a buffer for the major firms that helps them maintain their lifetime employment systems.

Managerial Decision Making. For some time there has been a fad in the United States and, to a lesser extent in Europe, to imitate aspects of Japanese management practices. For example, the Saturn subsidiary of General Motors was consciously set up along Japanese lines in contrast to the rest of GM, and recently it became more successful than the rest of GM. Although some argue that managerial practices cannot be exported from Japan because of cultural uniqueness, the success of Japanese automobile subsidiaries in the United States relative to U.S. producers suggests otherwise.<sup>28</sup>

Masahiko Aoki<sup>29</sup> argues that Japanese firms reflect a *J-mode* type of organization in contrast with an *H-mode* found in most U.S. and European corporations. The J-mode is characterized by "horizontal coordination among operating units based on the sharing of ex post on-site information (learned results)." This contrasts with the H-mode characterized by "hierarchical separation between planning and implemental operation and the emphasis on the economies of specialization." The J-mode depends upon both long-term relationships between workers and firms and long-term relationships between banks and firms, which tend to hold for keiretsu members with lifetime employment systems.

<sup>&</sup>lt;sup>26</sup>OECD Economic Surveys: Japan, 1991/1992 (Paris: Organization for Economic Cooperation and Development, 1992), p. 75.

<sup>&</sup>lt;sup>27</sup>OECD Economic Surveys.

<sup>&</sup>lt;sup>28</sup>However some U.S. companies touted as following Japanese practices such as lifetime employment have fallen on hard times, for example, IBM.

<sup>&</sup>lt;sup>29</sup>Masahiko Aoki, "Toward an Economic Model of the Japanese Firm," Journal of Economic Literature 28 (1990), pp. 1-27.

Small pay differentials between workers and top managers in Japanese firms and the fact that usually top managers have risen from within the firm increase the loyalty and links between the two, making management essentially the representative of the employees. Thus Japanese firms resemble labormanaged firms although rank hierarchies are strongly maintained. Aoki maintains that horizontal coordination only works because of the existence of a rank incentive structure.

Horizontal coordination is carried out through elaborate processes of consensual decision making (nemawashi), which involves discussion of a decision with virtually everyone involved. Westerners sometimes complain that Japanese decision makers have too many meetings and are slow to come to decisions. But advocates of the system note that once a decision is reached, everyone is "on board" and knows what is involved. Thus the decision is more likely to be carried out effectively than a typical H-mode, purely top-down decision.

Not only do Japanese firms coordinate across equal levels, but also they encourage input from the bottom up. This leads to *ringi-sho*, or the writing of memos by underlings that are channeled upwards to superiors. Ringi-sho connects with the widespread use of quality circles and the dependence upon workers for suggestions for improving the firm's performance.<sup>30</sup> Maintenance of strict seniority-based rank hierarchies allows superiors to defer to underlings for their expertise when it is superior. Intracorporate solidarity and information sharing are further encouraged by such leveling devices as having only one cafeteria and parking lot for all employees rather than segregating top management in an overpaid ghetto of ineffective decision making.

Given the long-term nature of employee-firm relations and of bank-firm relations, Japanese managers use longer time horizons for strategic planning. A manifestation of long-term planning is a greater emphasis upon maximizing market share subject to a minimum profit constraint rather than maximizing short-run profits.

Long-term bank financing allows Japanese firms to resist pressures that come from stock markets for short-run profits through threats of takeover raids. Firms are further insulated against such pressures by the high level of cross-holdings of stocks between firms and between banks and firms. This willingness of banks to take a long-term view depends on the high Japanese savings rate, which allows for low interest rates that stimulate both capital investment and a longer time horizon for that investment. This low cost of capital may be ending in Japan with the emergence of bank debt problems.

An example of the long-term view of Japanese managers versus the shortterm view of U.S. ones is the development of the VCR, invented in the United

<sup>&</sup>lt;sup>30</sup>Another element is widespread use of statistical quality control methods, introduced after World War II by the U.S. quality control expert, W. Edwards Deming, and ignored at the time in the United States. The Japanese established a prize for quality control in his name.

States and initially produced there. Unlike some other products where the United States lost out due to intensive Japanese competition (e.g., TVs), U.S. producers such as Westinghouse voluntarily gave up producing VCRs because of the initial slow growth of the market and the resulting low rates of return on investment. This occurred prior to Japanese entry into the market. During the 1980s VCRs were the most rapidly growing consumer market in the United States, but no U.S. firms participated.

#### Industrial Policy by Government

A controversial aspect of the Japanese economy is the role of government, famous for cooperative government-business relations labeled "industrial policy." The controversy arises over how much such cooperation actually goes on; if it goes on, how effective it is; and if it goes on and is effective, whether it is to be admired or condemned.

These disputes focus on the role of the Ministry of International Trade and Industry (MITI), main implementor of industrial policy. A lesser role is played by the Ministry of Finance (MOF) through its control over tax subsidies and the banking system, although the Ministry of Agriculture also attracts attention because of its protectionist policies, somewhat relaxed recently.

Those who argue that the state is the driving force of the Japanese economy point to the apparent supremacy of government bureaucrats. A sign of this is that after retirement from government, high-level bureaucrats "descend from heaven" (amakudari) to high-level employment in top firms. Chalmers Johnson<sup>31</sup> identifies the 15 MITI Vice Ministers (top internal officials) from 1949 to 1978 and their amakudari positions. These include President and Chairman of Toshiba, President of New Japan Steel, Chairman of Nippon Kokan Steel, President of Japan Petrochemical Corporation, Managing Director of Mitsui Trading Company, Executive Director of Toyota, and President of Sumitomo Metals Corporation, among other equally impressive positions.

All of these men served in MITI and its predecessor ministries from before or during World War II.<sup>32</sup> Thus Johnson sees substantial continuity between wartime planning practices carried out by the Ministry of Munitions and its postwar successor, MITI. These policies include sectoral financial targeting, encouragement of bank rather than equity financing, encouragement of better labor relations, and the use of selective cartelization.

<sup>&</sup>lt;sup>31</sup>Chalmers Johnson, MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975 (Stanford: Stanford University Press, 1982), p. 72.

<sup>&</sup>lt;sup>32</sup>Many of them were part of the promilitary ''reform bureaucrat'' movement of the 1930s who first experimented with economic planning in Manchuria. Some were initially influenced by the Soviet model of five-year plans for industrialization, but later followed the ''corporate state'' approach of Nazi Germany.

The basic pattern of MITI intervention in markets relates to product cycles. MITI gets in at the early stage and at the end stage, but gets out during the middle stage. In the beginning stage of an industry targeted for growth, favored policies include infant industry tariffs, <sup>33</sup> subsidies for special capital investments (often coordinated with the MOF), and rationalization cartels that seek to take advantage of economies of scale or carry out MITI-financed R&D projects. Rationalization cartels were used in the early 1950s for steel, coal, shipbuilding, electric power, synthetic fibers, and chemical fertilizers, and in the late 1950s for petrochemicals, machine tools, and electronics. Currently they focus upon computers, high definition TV, superconductivity, and biotechnology.

At the end of the product cycle, MITI eases the closeout using depression cartels. These were used in both coal and shipbuilding in the 1970s. However both of these kinds of cartels have been less used lately because of increased antitrust enforcement in response to international pressure. The use of cartels for R&D has continued and has recently been imitated in the United States. Also more recently MITI has shifted to aiding adjustment for reducing environmental pollution and aiding adjustment to results of trade disputes.

Those applauding the use of industrial policy in Japan point to the overall rapid growth of the Japanese economy and the export success of such favorably targeted industries as shipbuilding, steel, and computers. Those questioning the effectiveness of MITI's policies note that several of the most effective export sectors were not targeted, including sewing machines, cameras, bicycles, motorcycles, pianos, radios, tape recorders, magnetic tapes, audio components, watches, pocket calculators, machine tools, textile machines, ceramics, and robotics.

MITI failed in the late 1950s to cartelize the automobile industry down to two firms. One firm very resistant to MITI's entreaties was Honda, perhaps the most technically innovative of the Japanese automobile companies and a great export success. Another firm resistant to MITI has been the technically innovative and export-successful Sony, which rejected MITI's advice not to produce transistor radios in the 1950s. Both companies were founded and led by strong-willed entrepreneurs operating outside of the planning and keiretsu systems.

Another criticism of MITI's effectiveness is that many of its subsidized research projects have not worked out as hoped for, a noticeable recent trend. A dramatic example is the failed project for fifth-generation computer development that followed successful earlier projects in the computer area.

Thus Japan is experiencing the pressures to move away from government management of the economy that are felt elsewhere. The heyday of MITI as



<sup>&</sup>lt;sup>33</sup>Import restrictions were lifted on buses and trucks in 1961, on color TVs in 1964, on automobiles in 1965, on color film in 1971, on cash registers in 1973, on large memory integrated circuits in 1974, and on computers in 1975, all industries where Japan is now an export power.

TABLE 6-3 Economic Growth Rates

Years	Japan	France	Germany	United States
1966–73	10.1	5.8	4.3	3.6
1973-80	4.3	2.9	2.6	2.5
1980-85	3.8	1.1	1.4	1.9

Source: From Bela Balassa and Marcus Noland, Japan in the World Economy (Washington: Institute for International Economics, 1988), pp. 6-7.

the guiding light of the Japanese economy was in the 1940s, 50s, and 60s, when it was relatively easy to identify a sequence of industries on which the economy could focus in turn as it played a catch-up development game. Now that it has caught up and is competing at the cutting edge of world technology, MITI's effectiveness is reduced.

# Will Japan Become Number One?

#### Macroeconomic Performance

From 1880 to 1940 the average annual rate of growth of real GDP was 3.41 percent, a rate exceeding that of any other country during that period. Since World War II Japan also has had the highest economic growth rate among the major advanced economies, all the while maintaining unemployment in the 1 to 2.5 percent range. This high rate of growth has been driven by a high rate of capital investment backed by a high savings rate.

Table 6-3 shows growth rates of GDP for Japan and France, and of GNP for Germany and the United States during the 1966-1985 period.

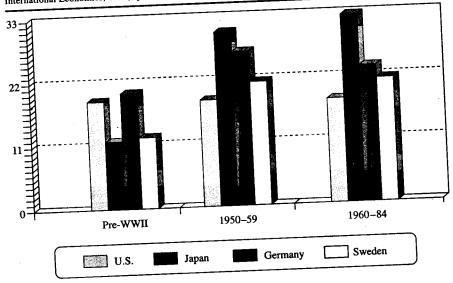
That rates of growth in all of these leading economies have declined, a trend that continues, is a simple snapshot of the global growth crisis mentioned in Chapter 1. In only two years since World War II has Japan had a negative growth of GDP, in 1954 and in the first oil shock year of 1974, although it had negative growth in several quarters of zero-growth 1994.

Underlying the high rate of capital investment is a high savings rate. Figure 6-1 shows gross savings rates as a percentage of GNP over time for several major economies.

Since World War II Japan has had a very high savings rate. That this was not so prior to the war undermines the theory that the high savings rate reflects Confucian ideals or practices. Among competing explanations are that saving is caused by high growth rates as consumption increases lag behind income increases, that individuals save to make downpayments on homes that are wildly overpriced, that workers save for old age because of the combination

**Gross Savings as Percent of GNP** 

Source: From Bela Balassa and Marcus Noland, Japan in the World Economy (Washington: Institute for FIGURE 6-1 International Economics, 1988), p. 83.



of early retirement with low pensions and low social security payments, that the lumpiness of large biannual bonuses encourages savings, that there is no capital gains tax except on land, and that through most of the postwar period Japan had a relatively young population.

This last point raises serious concerns about the future. One sign of Japan's success is that it now has the longest life expectancy in the world. But this is leading to a rapidly aging population, which when combined with early retirement implies a rising ratio of those not working to those working (dependency ratio) that may well lead to a depressed savings rate. By 2005 Japan's dependency ratio will substantially exceed 60 percent, higher than any other leading industrial country.34

# Macroeconomic Planning and Policy

Japan has a basically market capitalist economy with elements of tradition as well as significant amounts of indicative planning and guidance. Beyond the sectoral and technological planning carried out by MITI, the Economic Planning Agency (EPA) regularly puts forth macroeconomic plans with associated sets of policy goals.

The indicative nature of these plans means that they are more forecasts than plans. For most of the plans up until the 1970s, the actual growth rate of

<sup>34</sup>OECD Economic Surveys, p. 64.

the economy exceeded the planned growth rate, with the reverse generally being the case since.

Although the EPA draws up the plans, it is the Ministry of Finance (MOF) that carries them out and implements macroeconomic policy. Not only is it in charge of the budget and fiscal policy, but also of the central bank, the Bank of Japan. This makes Japan like Great Britain in not having an independent central bank. Although inflation has been moderate in Japan, inflation is one macroeconomic variable on which it has not been a world leader in performance until recently.

The structure of fiscal policy has attracted attention because of the relatively low levels of government spending and taxation in Japan. Supply-side economists in the United States emphasize the near nonexistence of capital gains taxes as a possible source of Japanese economic success. But the highest marginal income tax rates are 50 percent, higher than in the United States, as are the corporate income tax rates. It is argued that the relatively low level of social transfer payments encourages savings and hard work. Another element of the low spending is low defense spending, stemming from the U.S.—mandated demilitarization.<sup>35</sup>

## Quality of Life

According to the 1993 UN Human Development Report, Japan has the highest quality of life of any country in the world and thus in a sense may already be "Number One." The UN's index focuses upon measures of real per capita income adjusted for purchasing power parity, education, and life expectancy. Japan was tops in life expectancy at 78.6 years for 1990 and does very well on the other two measures. However the index for the white population of the United States is still higher than that of Japan. Also a measure accounting for gender discrimination puts Sweden on top and Japan 17th. In Japan women earn only 51 percent of what men do, compared to about 70 percent in the United States and over 85 percent in Sweden, Norway, and France.

Table 6-4 shows some indicators of living standards for various countries in 1990. In nominal terms Japan is well ahead of these countries in per capita income and per capita consumption. But it gets dragged down using the purchasing power parity (PPP) adjustment because of the high cost of food and housing in Japan relative to the others.

Another area in which the quality of life in Japan is high relative to other nations is its low crime rate. Thus the U.S. murder rate is 8.6 per 100,000 and the Japanese is 1.4; the U.S. rape rate is 37.5 per 100,000 and the Japanese is 1.4, and the U.S. armed robbery rate is 225.1 and the Japanese is 1.6.36 This

<sup>&</sup>lt;sup>35</sup>The Japanese Self Defense Forces were established with U.S. approval in 1954. The 1 percent of GDP spent on defense makes Japanese defense spending among the world's highest, given the large size of the economy. The low level of defense spending relative to the United States has meant that more Japanese engineers have been available for making civilian industry more competitive.

<sup>&</sup>lt;sup>36</sup>The Economist, "Japan Compared" (December 24, 1988), p. 50.

TABLE 6-4 General Living Standards

	France	Germany	Japan	Sweden	United States
Private per capita consumption using current	9441	9841	10122	8748	14465
PPPs, U.S. \$ Passenger cars per 1,000 inhabitants	494	526	455	462	748
Telephones per 1,000 inhabitants	610	680	555	889	650
	2.6	3.0	4.6	3.1	2.3
Doctors per 1,000 inhabitants Infant mortality per 1,000 live births	7.2	7.5	4.6	5.9	9.2

Source: From OECD Economic Surveys, Basic Statistics, 1992.

TABLE 6-5 Selected Gini Coefficients

	Japan	Sweden	W. Germany	United States	OECD average
Before taxes	0.335	0.346	0.396	0.404	0.366
After taxes	0.316	0.302	0.383	0.381	0.350

Source: From Martin Bronfenbrenner and Yasukuchi Yasuba, "Economic Welfare," in *The Political Economy of Japan: The Domestic Transformation*, eds. K. Yamamura and Y. Yasuba (Stanford: Stanford University Press, 1987), p. 111.

comparison reflects cultural values, although policies towards guns in the United States play a role.

Japan has one of the more equal income distributions in the world. This equality is not due to government redistribution but reflects the egalitarian wage structure arising from the labor-management system. Income distribution is seen by looking at before- and after-tax distributions. Before taxes Japan is more equal than Sweden, but it is less so after taxes. Table 6–5 makes the two comparisons for Gini coefficients<sup>37</sup> for selected countries for the mid-1970s.

Some dark sides of the Japanese paradise are captured in the widely repeated phrase about "workaholics in rabbit hutches." The Japanese work much longer hours with fewer vacations than almost anybody anywhere. In large metropolitan areas, especially Tokyo, they spend long times commuting under highly congested conditions. They pay very high prices for cramped living quarters often lacking the sanitary facilities of most developed nations. Housing and congestion questions are addressed in Table 6–6.

<sup>&</sup>lt;sup>37</sup>Gini coefficients are the ratio of the area between a Lorenz curve and the diagonal line to the area under the diagonal line. A Lorenz curve relates percent of rank-ordered population to percent of income. Perfect inequality would generate a Gini coefficient of one, perfect equality a Gini coefficient of zero. See Chapter 1 for further discussion.

<sup>&</sup>lt;sup>38</sup>Japan is one of the most congested countries in the world. It is slightly smaller than California but has about half the population of the United States. Much of Japan is uninhabitable mountains, further increasing the congestion.

TABLE 6-6 Housing and Infrastructure

	Japan	United States	United Kingdom	France
Floor space per reside	nt			
Square meters	25.0	61.8	35.2	30.7
Year	1988	1987	1988	1984
Urban park space per resident	Tokyo	New York	London	Paris
Square meters	2.5	19.2	30.4	12.2
Year	1988	1976	1976	1984
Sewerage service coverage	erage ratio			
Percentage	45	73	95	64
Year	1991	1986	1982	1983
Expressway extension	per 10,000 vehi	cles		
Kilometers	0.96	4.55	1.16	2.69
Year	1991	1988	1989	1989

Source: OECD Economic Surveys, p. 60.

Another problem is environmental pollution, although there has been improvement in this area since the 1960s. In the late 1960s several major disasters occurred that triggered major efforts to clean up, most infamously the Minamata disease caused by mercury pollution in shellfish and the itai itai (ouch ouch) disease caused by cadmium pollution. From 1965 to 1980 sulfur dioxide emissions in parts per million declined from 0.057 to 0.016 and organic water pollutants in parts per million declined from 23.11 in 1970 to 9.20 in 1980.39 These trends, plus the high life expectancy, suggest that Japan is getting pollution under control.

Finally, Japanese society suffers from serious problems of discrimination. Besides the low wages received by women, discrimination also exists against foreigners (gai-jin), the largest such group being Koreans. Most Koreans are descendants of people brought in to work when Japan ruled Korea, but they still are not allowed to become citizens and their professional activities are restricted. Japanese also discriminate against the indigenous Ainu who live in the North and a group known as the Burakumin who are descended from people who held undesirable jobs in the feudal period.

## Is the "Economic Miracle" Over?

Although Japan's economic growth rate consistently exceeded that of its rivals for the position of "Number One" during the postwar era, the United States, Germany, and the former Soviet Union, its growth rate has more dramatically decelerated than those of its rivals, except for the FSU. After an enormous

<sup>&</sup>lt;sup>39</sup>Martin Bronfenbrenner and Yasukuchi Yasuba, "Economic Welfare," p. 111.

proliferation of hype regarding Japan's prospects we have more recently been inundated with allegations of the opposite, that Japan has run out of steam and that its economic miracle is over. Whereas in the late 1980s it looked only a matter of a few decades before Japan surpassed the United States in aggregate GDP, this outcome now seems less likely. Several theories have been advanced for this altered situation.

One focus is upon the central savings-investment nexus. Japan is a rapidly aging society that will experience rising dependency ratios, tending to depress the savings rate, a victim of its own success as a society able to support long life. A solution to this problem might be to delay retirement. But doing so would clash with the Confucian value system that emphasizes respect for elders. In a typical large Japanese corporation, when someone is appointed Chief Executive Officer all those who are his age or older retire, reinforcing the tendency to early retirement in Japan.

Another stimulus to Japanese investment has been the low cost of capital, due mostly to the high savings rate. But as Japan's financial system has been opened up, these high savings have been channeled abroad, thereby tending to reduce this international differential.

Another source of the low cost of capital until recently was the high price-earnings ratios in the Japanese stock market relative to other countries. These high price-earnings ratios reflected high expectations regarding future Japanese growth and future earnings of Japanese corporations. But as the growth of the Japanese economy visibly decelerated it became clear that these expectations were exaggerated and the values of Japanese stocks fell sharply ending the "bubble economy." In this respect economic growth is a self-fulfilling prophecy. The expectation of high growth helped generate high growth by lowering the cost of capital. When that expectation disappeared, the cost of capital rose thus making it harder to grow. More generally Japanese banks have damaged portfolios, weakening their financing of long-run growth.

Many now regard the crash of asset values as the watershed event of the Japanese economy that both symbolizes and actualizes its newly realized constraints. It is now widely accepted that the run-up in stock prices in the late 1980s was a speculative bubble that crashed. In the early 1970s price-earnings ratios were about equal in the United States and Japan. By the end of 1989 when the Nikkei index of major stock market prices peaked at over 38,000, Japanese ratios were about four times those in United States. By late 1992 the Nikkei had fallen to around 14,000. It rose for awhile after market interventions by the MOF and an easing of monetary policy, but has declined again in mid-1995 to this general level as GDP growth has failed to restart.

Lying behind the speculative bubble in stocks and also such losing foreign investments as the purchase of Pebble Beach golf course in California was an enormous run-up in land and real estate prices in Japan. Owners of highly priced real estate could use it as collateral to borrow from Japanese banks for buying stocks or making foreign investments. At the peak, residential property in downtown Tokyo was worth 40 times more than equivalent properties in

downtown London.<sup>40</sup> This led to wild estimates that the palace grounds of the emperor were worth more than the state of California and that metropolitan Tokyo was worth more than Britain, France, and Germany put together. These prices have declined without turning up during the 1990s, although not by as much as stock prices.

These high real estate prices aggravated the housing shortage problem. Whereas the ratio of housing prices to annual income was about one to one in 1950 in both Tokyo and Japan as a whole, by 1983 it had risen to 7.9 for Tokyo and 6.7 for Japan as a whole.<sup>41</sup> And land prices would nearly double after that before peaking. The land problem fundamentally arises from a combination of low property taxation, especially of agricultural land in cities,<sup>42</sup> but high capital gains taxation on real estate, along with a variety of land use restrictions. These forces lead to a "lock-in" effect that produces a strong disincentive to sell land. But at least half of the peak land prices reflected a speculative bubble that has now ended.

This collapse of asset values has coincided with a broader systemic crisis in Japan. The gains in wealth from the bubble were very unevenly distributed, undermining the groupist solidarity of Japanese society. Scandals erupted regarding the involvement of high politicians in the speculation. The disgust of the Japanese public reached the point that the ruling Liberal Democratic Party split and fell from power in July 1993.

The deceleration of growth could be a self-reinforcing process if it undermines the microeconomic foundations of the economy by causing layoffs in the large corporations and the end of the lifetime employment system. Breaking the loyalty of Japanese workers to their companies could be a fatal blow.

But all of this may be just a course correction, an adjustment to a more realistic path after an overheated episode in the late 1980s. The most fundamental question has to do with technological leadership. Will Japan take it from the United States across the board? If so, it will become the world's unequivocal economic leader. If not, it will at best remain Number Two.

Optimists about Japanese prospects stress how Japan has outcompeted the United States in industry after industry, moving up from low technology industries such as steel to higher ones such as automobiles, cameras, TVs, and a variety of consumer electronics. The role of MITI in industrial policy, including its funding of R&D, is often cited, as is the continuing much higher rate of capital investment. Also the far higher level of education in mathematics and science of the workforce relative to the United States is emphasized, as well as the harmonious intrafirm relations.

<sup>&</sup>lt;sup>40</sup>Yukio Noguchi, "Land Problem in Japan," Hitotsubashi Journal of Economics 31 (1990), pp. 73-86.

<sup>&</sup>lt;sup>41</sup>Takatoshi Ito, The Japanese Economy, p. 412.

<sup>&</sup>lt;sup>42</sup>There are rice farms in Tokvo.

Skeptics abound. Some argue that Japanese companies achieved their greatest successes when they were able to license existing technologies from abroad and then perfect them. But in outright competition to generate new technologies from scratch the United States retains fundamental advantages. These critics cite the ability of leading elements of the U.S. computer and software industries to maintain their leads despite the massive focus of MITI on this sector. Their central argument is that the groupist mentality of the Japanese may be great for imitating, but it does not encourage the sort of individual creativity that underlies frontier research and major technological breakthroughs.

The most basic problem may be at the highest level of academic scientific research where Japan has produced very few Nobel Prize winners compared to the United States. Whereas Japanese high schools may far outcompete U.S. ones for teaching mathematics and science, this learning is largely rote. At the university level rigid seniority-driven vertical hierarchies stifle research and the most creative Japanese researchers end up going abroad. The sources of Japan's success become the sources of its failure.

But this view is not universally accepted. That Japan is not currently the world's scientific leader does not mean it cannot be. The United States was a leader in innovation and new product development in the mid-19th century long before its emergence as the world's basic science leader at the end of World War II. Increasingly Japan is not merely imitating, but is inventing new products, the Sony Walkman being a notable example. Furthermore it is vociferously argued that the "rote imitators" argument is a racist insult that ignores the many creative and innovative Japanese citizens in many different areas such as architecture, clothing design, literature, and film. Box 6-1 examines this creativity in more detail.

The enigma of Japanese creativity is rather like the paradox of Zen Buddhism. It can be viewed as both a source of ultimate creativity or as a source of mindless obeisance to superiors. The "annihilation of the ego" can be either a liberating enlightenment or the submission of the samurai to his master's any command. The most famous Zen koan, "What is sound of one hand clapping?" can be seen as a mystical source of contemplation or as the trigger for a well-known rote response, the devotee swinging one of his hands through the air in a one-handed "clap." And all of the above may be true in an appropriately Japanese, Rashomonlike "multiple reality" manner.

# Japan and the World Economy

The question of technological competition between the United States and Japan comes to a head in the area of international trade. Among the most visible signs of Japanese economic success has been its ability to penetrate many export markets and to develop large trade surpluses. But these surpluses, along with the widespread perception that Japanese markets are unfairly protected from imports, has triggered enormous resentment and anti-Japanese sentiments around the world.

#### Box 6-1

# The Cultural Foundations of Japanese Technological Innovation

Sheridan Tatsuno argues that the Zen Buddhist tradition of Japan underpins a cultural tradition of technological innovativeness. He points out connections between Japanese traditional arts and areas in which Japanese have been successful in modern technologies:\*

Traditional Art	Aesthetic Principle	<b>Business Application</b>
Wood carving	Miniaturization	Pocket TV
	Animism	Video animation
Bonsai	Miniaturization	Electronic products
	Trained growth	Bioengineering
Flower arrangement	Creative forms	Robot design
	Naturalism	Commercial landscaping
	Asymmetry	Amorphous crystal growth
Rock gardens	Reductionism	Home construction
	Aesthetic asymmetry	Science city design
	Meditative space	Research lab design
Architecture	Multipurpose rooms	Apartment housing
	Open to nature	Office complexes
	Natural materials	Office interiors
Paper folding	Manual dexterity	"Transformer" toys
· •	Complex 3-D forms	Computer-aided design
Hand-sewn juggling balls	Aesthetic play	Educational toys
Abacus	Manual dexterity	Calculator keyboards
	Visualization	Computer simulation
Chopsticks	Manual dexterity	Robot fingers
Folding fans	Collapsible space	Laptop computer design
	Aesthetic function	Ergonomic furniture
Japanese characters	Visualization	Fifth-generation
	Image recognition	computers
		Visual scanners
Wrapping cloth	Multipurpose; compact	Folding solar panels

This list may be quite fanciful, but it does emphasize that the image of the mindlessly imitative Japanese is misplaced. The rising generation of highly educated young Japanese is quite likely to be more creative than its predecessors.

<sup>\*</sup>Sheridan Tatsuno, Created in Japan: From Imitators to World-Class Innovators (New York: Ballinger, 1990), p. 57.

#### Box 6-2

## **Does Japan Follow a Long-Term Strategy?**

In 1857, Masayoshi Hotta, an adviser to the shogun declared:

I am therefore convinced that our policy should be to stake everything on the present opportunity, to conclude friendly alliances, to send ships to foreign countries everywhere and conduct trade, to copy the foreigners where they are at their best and so repair our own shortcomings, to foster our national strength and complete our armaments, and so gradually subject the foreigners to our influence until in the end all the countries of the world know the blessings of perfect tranquillity and our hegemony is acknowledged throughout the globe.\*

\*Quoted in Clyde V. Prestowitz, Jr., Trading Places: How We Allowed Japan to Take the Lead (New York: Basic Books, 1988), p. 21.

Disputes between the United States and Japan have increased recently and a new atmosphere has emerged. At the heart of the arguments of the U.S. revisionists seems to be a resentment of Japanese trade surpluses. The case has been articulately made by former U.S. trade negotiator Clyde Prestowitz<sup>43</sup> who argues that Japan, viewing things in power terms, always gets the best of the United States in trade negotiations because it has wily MITI bureaucrats who take a long-run view.

Prestowitz has little patience for traditional trade negotiations and demands "results-oriented" agreements such as a deal for 20 percent of the market share for semiconductor chips, rather than agreements that ratify rules, which he claims the Japanese always cheat on. Such views have found sympathy in the Clinton administration, which has had confrontational relations with Japan over trade issues, partly because Japan has its own analysts who are the mirror image of the U.S. revisionists.

An assertive and popular example is Shintaro Ishihara, quoted at the beginning of this chapter, who participated in trade negotiations with the United States as Transport Minister. He charges that United States—Japan trade frictions arise from American racism and hypocrisy and that the United States must accept the "imminent demise" of the "modern era," in which the United States has dominated Japan. The title of his book, The Japan That Can Say No, has become a popular slogan in Japan.

Are there any facts that are clear from this controversy? One is that Japan experiences and has experienced for some time significant trade surpluses. In

<sup>&</sup>lt;sup>43</sup>Clyde V. Prestowitz, Jr., Trading Places: How We Allowed Japan to Take the Lead (New York: Basic Books, 1988).

1991 its trade surpluses equaled \$103 billion, and a substantial portion of that came from the United States.<sup>44</sup> Generally Japan exports manufactured goods and imports raw materials and agricultural goods. Japan feels driven to export because of its extreme dependence on imports.

But why does Japan have such large surpluses? It has the lowest tariffs and quotas of any major industrialized nation, if one does not count agriculture. With respect to the United States, 90 percent of Japan's trade surplus is in four sectors: automobiles, computers, VCRs, and semiconductors. The Japanese position is that the surpluses reflect superior Japanese competitiveness in price and quality. Critics question this assertion, arguing that the Japanese have targeted these high-technology sectors through industrial policy that uses dumping and other unfair techniques to "hollow out" critical U.S. industries, one after another.

Critics claim that Japan uses a variety of informal barriers to imports, including "administrative guidance" by ministries including MITI, overly "fastidious" interpretations of customs procedures, ridiculous safety standards, 46 bureaucratically arbitrary testing and certification procedures, biased public procurement policies, MITI's rationalization and depression cartels and subsidizing of high technology R&D, 47 unfair patent rules, and inefficient retail distribution channels. 48 Furthermore critics charge that the vertical keiretsu system and the high savings rate constitute "structural impediments" to imports. The Japanese respond that their trading partners engage in similar practices. 49

Despite these many difficulties there are U.S. companies that have succeeded in penetrating the Japanese market. Some successes include IBM, Texas Instruments, Motorola, MacDonald's, Coca-Cola, and Gillette, although executives from some of these companies have complained of the barriers they have faced.

A hope for overcoming these difficulties lies in multilateral negotiations such as the Uruguay Round of General Agreement of Tariffs and Trade (GATT) negotiations, completed in December 1993, which resulted in the formation of the World Trade Organization (WTO). Unfortunately the 1995

<sup>44</sup>OECD Economic Surveys, p. 27.

<sup>&</sup>lt;sup>45</sup>OECD Economic Surveys, p. 86. Japan had an absolute ban on importing rice until late 1993, leading its citizens to pay six times world prices for rice. But it imports large amounts of corn and soybeans from the United States. The United States protects many agricultural products, with the European Union being even more protectionist with respect to agriculture.

<sup>&</sup>lt;sup>46</sup>A notorious example of safety standards was the restriction on importing U.S. baseball bats on alleged safety grounds.

<sup>&</sup>lt;sup>47</sup>The Japanese correctly respond that the United States does this too for computers, aircraft, and biotechnology.

<sup>&</sup>lt;sup>48</sup>Inefficient channels are found in the secondary sector of the Japanese economy, labor-intensive "mom and pop" operations, and it is hard for a foreign producer to deal with them.

<sup>&</sup>lt;sup>49</sup>A much touted case was France's routing of all Japanese VCRs through the internal city of Poitiers for customs inspection where they piled up due to a lack of customs inspectors there.

United States-Japan dispute about auto parts trade completely bypassed the WTO. In November 1994, the Asia Pacific Economic Cooperation (APEC) group<sup>50</sup> declared free trade as a goal by 2020. Achieving such a goal requires mutual good will, a commodity currently in short supply between the United States and Japan on this issue.

## **Summary and Conclusions**

The Japanese economy is the most successful new traditional economy in the world. It has combined a family-oriented approach derived from its unique combination of Shintoism, Confucianism, and Buddhism with the successful adoption of modern technology in a planned market capitalist context. After opening to outside trade in the 1850s and the subsequent Meiji Restoration, Japan embarked on an outwardly oriented path of rapid economic expansion that has continued to the present time, except for the disruption associated with World War II. The immediate postwar Occupation by the United States brought changes, but Japan has preserved its national culture and identity while absorbing outside influences and technologies.

Japan's large corporations practice a form of management that emphasizes close relations with workers. They have lifetime employment, seniority wages, and enterprise unions. Japanese managers engage in widespread consultation and horizontal coordination in their decision making, as well as encouraging the input of those below in well-defined hierarchies. Because of long-term financing from banks, managers use longer time horizons in their decision making than occurs in most economies. Most large corporations belong to either horizontal or vertical keiretsus, associated groups of companies that coordinate their activities to some degree.

Government works cooperatively with business through an indicative planning process. Industrial policy targeting rising and declining sectors for assistance is carried out by MITI, which also subsidizes R&D activities. But some of the most successful Japanese corporations have stayed outside of both the keiretsu and the industrial policy structures.

Long-term macroeconomic performance has been very impressive, and Japan now has the second highest aggregate GDP in the world, surpassing the United States in nominal per capita income. Unemployment has remained low and the distribution of income has been fairly equal.

By some measures Japanese citizens may have the highest quality of life in the world. They enjoy the longest life expectancy, high material standards of living, high levels of education, and very low crime rates. However, housing

<sup>50</sup>Members are Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, South Korea, Taiwan, Thailand, and the United States.

shortages persist as well as significant discrimination against women and minority groups.

Despite past success economic growth has substantially slowed down and may not pick up again. The aging of the population bodes ill for its high savings and investment rates, which are also hurt by the crash of the speculative bubbles in stocks and real estate. Japan's ability to generate cutting-edge technology rather than just borrow from others has been seriously questioned, although some analysts are more optimistic. In many areas the Japanese economy is moving to resemble that of the United States.

Japan faces serious questions about its trade relations with the rest of the world, especially the United States, its main rival for being Number One. Ultimately the role Japan plays depends on its willingness and ability to deal successfully with the rest of the world, an effort complicated by recent internal political upheavals. Whatever the outcome, the decisions and directions that Japan takes will be of profound importance for the entire world.

## **Questions for Discussion**

- 1. In what sense can Japan be viewed as a new traditional economy? In what sense might this claim not be true?
- 2. How do the "three sacred treasures" of labor reinforce each other? What trends in the Japanese economy may be leading to their disappearance?
- 3. Distinguish horizontal and vertical keiretsu. How do they both help and hinder the Japanese economy?
- 4. Distinguish the "J-mode" of management from the "H-mode." What are advantages and disadvantages of each?
- 5. Why has industrial policy become less effective in Japan recently?
- 6. What are the arguments for and against the possibility that Japan will surpass the United States in technological leadership?
- 7. Will real acceptance by Japan of free trade lead to a loss of Japanese economic identity and a convergence on the U.S. model?

# **Suggested Further Readings**

The Economist. "Death of a Role Model." July 9, 1994.

Ito, Takatoshi. The Japanese Economy. Cambridge: MIT Press, 1992.

Komiya, Ryutaro. The Japanese Economy: Trade, Industry, and Government. Tokyo: University of Tokyo Press, 1990.

Nanto, Dick K. "Japan's Industrial Groups." In Comparative Economic Systems: Models and Cases, 7th ed. ed. Morris Bornstein. Burr Ridge: Irwin, 1994, pp. 236-52.

- Patrick, Hugh T. "Japanese Industrial Policy." In Comparative Economic Systems: Models and Cases, 7th ed. ed. Morris Bornstein. Burr Ridge: Irwin, 1994, pp. 223-35.
- Reischauer, Edwin O. The Japanese Today: Change and Continuity. Cambridge: The Belknap Press of Harvard University Press, 1988.
- Shimada, Haruo. "The Perception and the Reality of Japanese Industrial Relations." In Comparative Economic Systems: Models and Cases, 7th ed. ed. Morris Bornstein. Burr Ridge: Irwin, 1994, pp. 253-67.
- van Wolferen, Karel. The Enigma of Japanese Power. New York: Alfred A. Knopf, 1989.